

PHOTO-INDUCED HYDROPHILIC ARTICLE AND METHOD OF MAKING SAME

ABSTRACT OF THE INVENTION

Methods and articles are disclosed in which a substrate is provided with a photo-induced hydrophilic surface by forming a photo-induced hydrophilic coating on the substrate by spray pyrolysis, chemical vapor deposition, or magnetron sputter vacuum deposition. The coating can have a thickness of 50 Å to 500 Å, a root mean square roughness of less than 5, preferably less than 2, and photocatalytic activity of less than $3.0 \times 10^{-3} \text{ cm}^{-1} \text{ min}^{-1} \pm 2.0 \times 10^{-3} \text{ cm}^{-1} \text{ min}^{-1}$. The substrate includes glass substrates, including glass sheets and continuous float glass ribbons.